



CLAIMS LISTING

Claims 1-30 (canceled)

Claims 31-111 (canceled)

112. (CURRENTLY AMENDED) A computer-implemented business method for actively and declaratively managing, implementing, and executing a first dynamic process incorporating a dynamic pattern of operations driven by real-world conditions causing at least a first behavioral pattern to emerge, said computer-implemented business method comprising:

(a) declaring and stating an Objective of said first dynamic process as a set of measurable Goals and Constraints;

(b) declaring and stating at least one Objective Rule Set having a plurality of Rules, said Rules in the said Objective Rule Set being defined to accomplish at least a part of said Objective by the combination of at least one subset thereof: wherein the Rules in said Objective Rule Set may act in any order subject to the limitation that, for any specific Rule in said Objective Rule Set, that specific Rule's Condition and applicable Constraints must be satisfied before that specific Rule's Action may occur;

(c) delegating to at least one specific set of Actors consisting of at least one Actor: at least a first subordinate Objective, subordinate to the Objective, stating the first subordinate Objective as a subset of subordinate, measurable Goals and subordinate Constraints; a set of Rules for accomplishing said first subordinate Objective; authority via at least one Rule stating authority for attaining the subordinate, measurable Goals of said first subordinate Objective;

1 accountability via at least one Rule stating accountability for attaining the
2 subordinate, measurable Goals of said first subordinate Objective; and,
3 responsibility via at least one Rule stating responsibility for attaining the
4 subordinate, measurable Goals of said first subordinate Objective subject
5 to the Constraints and subordinate Constraints;
6

7 (d) determining ~~the satisfaction of any~~ if at least one Rule's Condition is satisfied
8 and if so triggering ~~the occurrence of~~ said Rule's Action;

9 wherein said Rule's Condition incorporates at least one Measurable Value
10 from at least one member of a set of sources; and,
11 said set of sources comprise a source internal to said first dynamic
12 process, a source external to said first dynamic process, and a source in the
13 real world;
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15 (e) modifying at least one Element of said dynamic process through the Action of
16 at least a Rule whose Condition is triggered by at least one input from an event in
17 the real world;
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19 (f) defining any Actor as being at least one member of an Actor set comprising
20 human agent, semi-automated agent, and automated agent;
21

22 (g) defining any Element as being one member of an Element set comprising a
23 Goal, Rule, Rule Set, Condition, Action, Constraint, Measurable Value, and
24 Delegation;
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26 (h) defining each Rule so as to comprise a Condition that is satisfied when it
27 evaluates to a specified and predetermined value and an Action that is triggered
28 when the Condition is satisfied;
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30 (i) determining the triggered Action of at least a first Rule and its relative order
31 with respect to a second Rule's Action, and therefore the behavior of the dynamic

1 process, at least partially by logical inference from Conditions and Constraints
2 rather than said relative order being predetermined and required by human
3 mandate;

4
5 (j) executing automatically at least a subset of the dynamic pattern of operations
6 that progresses towards said Objective, defining said subset of the dynamic
7 pattern of operations as comprising a plurality of operations, each operation
8 therein being temporally contiguous to at least one other operation in said subset
9 of the dynamic pattern of operations; and,

10
11 (k) specifying a plurality of Elements and implementing each of the steps of
12 declaring and stating, delegating, determining, and modifying, through a
13 declarative and therefore non-procedural representation.

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16 113. (Previously Presented) A method as in Claim 112 further comprising iterating at
17 least one of the steps of declaring and stating, delegating, determining, and modifying.

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20 114. (Previously Presented) A method as in Claim 112, further comprising the step of
21 redeclaring and restating at least one Action of at least one Rule as a second dynamic
22 process.

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25 115. (Previously Presented) A method as in Claim 112 wherein the dynamic process
26 represents a business's operational flow, said operational flow being that business's
27 fundamental business activity of producing goods and services.

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30 116. (Previously Presented) A method as in Claim 112 further comprising adding at least
31 one new Element to the dynamic process in response to at least one input.

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3 117. (Previously Presented) A method as in Claim 112 further comprising the step of
4 using the measurable Goals and Measurable Values to enable assessment of any member
5 of a set of assessments, that set of assessments comprising risk of error, minimum
6 contribution of any Rule to the Goal, maximum contribution of any Rule to the Goal, risk
7 of deviation from the Goal due to the Action of any Rule, performance of at least one
8 Actor, and relative efficiencies among any two Actors.
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11 118. (Previously Presented) A method as in Claim 112 further comprising using the
12 deviation of Measurable Values from measurable Goals for at least one member of a set
13 comprising accounting control, regulatory control, and reporting without first requiring
14 that the dynamic process terminate.
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17 119. (Previously Presented) A method as in Claim 112 wherein said method forms a
18 business autopilot, which, once initiated, requires no human intervention to manage
19 successful execution of said subset of the dynamic pattern of operations even when
20 Actions and operations are implemented by human Actors.
21

22
23 120. (Previously Presented) A method as in Claim 112, further comprising:
24 including a set of Constraints consisting of at least one Constraint;
25 including a first Rule Set consisting of at least a first Contained Rule;
26 including a second Rule Set consisting of at least a second Contained Rule; and,
27 including a set of ordering Rules consisting of at least one ordering Rule;
28 wherein the relative order by which each first Contained Rule in the first Rule Set and at
29 least a second Contained Rule in the second Rule Set are satisfied is determined
30 according to at least one member of a set comprising the set of Constraints, implicit Rule
31 precedence making the Action of each Contained Rule in the first Rule Set satisfy a

1 Condition of the second Contained Rule, the set of Constraints, and the set of ordering
2 Rules.

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5 121. (Previously Presented) A method as in Claim 112, further comprising declaring and
6 stating at least a first Rule Set and a second Rule Set, wherein the second Rule Set is
7 subordinate to the first Rule Set, and wherein the second Rule Set inherits from the first
8 Rule Set at least one Condition of a Rule in the first Rule Set as a Constraint on the
9 second Rule Set and at least one Action of a Rule in the first Rule Set as a Goal of the
10 second Rule Set.

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13 122. (Previously Presented) A method as in Claim 112, further comprising declaring and
14 stating at least a first Rule Set and a second Rule Set, wherein the second Rule Set is
15 subordinate to the first Rule Set, and wherein at least one change in Constraints by Action
16 of at least one Rule of the second Rule Set is passed to the first Rule Set.

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19 123. (Previously Presented) A method as in Claim 112, wherein said declarative and
20 therefore non-procedural representation is at least one member of a representation set
21 comprising symbolic logic and declarative computer language.

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24 124. (Previously Presented) A method as in Claim 112, wherein for at least one Rule:
25 the Condition of said Rule detects a difference between at least one Element of
26 said dynamic process and a Measurable Value from at least one input, and the
27 Action of said Rule has an affect on at least that one Element of said first dynamic
28 process by modifying that one Element to do at least one member of a response
29 set comprising accommodate the Measurable Value, and adjust performance of
30 said dynamic process as indicated by the Measurable Value.

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2 125. (Previously Presented) A method as in Claim 112 further comprising analyzing the
3 efficiency of a business operation by measuring the deviation of Measurable Values from
4 measurable Goals.

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7 126. (Previously Presented) A method as in Claim 112 further comprising :
8 incorporating a set of resolving Constraints comprising at least one member of a
9 resolving set comprising a resolving Constraint and a resolving Rule; and,
10 incorporating at least one ambiguous Rule;
11 wherein said set of resolving Constraints determines whether the ambiguous Rule's
12 Action will be triggered when the evaluation of the ambiguous Rule's Condition is not a
13 value that has been otherwise determined to cause the ambiguous Rule's action to trigger.

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16 127. (Previously Presented) A method as in Claim 112 wherein, in the step of delegating,
17 at least one member of what is delegated to one specific Actor is a consequence of the
18 Rules, Constraints, and measurements associated with an Actor.

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21 128. (Previously Presented) A method as in Claim 112 wherein at least one Element
22 maintains consistency among any combination of authority to act, responsibility,
23 response to operational failure, and accountability.

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26 129. (Previously Presented) A method as in Claim 112 wherein at least one Rule makes
27 explicit why Actions are undertaken and what is to be achieved.

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30 130. (Previously Presented) A method as in Claim 112 further comprising replacing a
31 first Unrefined Rule by a set of refinement Rules that include at least the Action of the

1 first Unrefined Rule without the set of refinement Rules including the first Unrefined
2 Rule.

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5 131. (Previously Presented) A method as in Claim 130 further comprising
6 incorporating a first risk of error associated with the first Unrefined Rule;
7 incorporating a second risk of error associated with a second Refinement Rule
8 belonging to the set of refinement Rules;
9 wherein the second Refinement Rule has the least risk of error of any Refinement Rule in
10 the set of refinement Rules; and wherein the second risk of error is not greater than the
11 first risk of error.

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14 132. (Previously Presented) A method as in Claim 112 wherein the step of declaring and
15 stating at least one Objective Rule Set comprises stating at least a first Objective Rule Set
16 and a second Objective Rule Set, wherein the first Objective Rule Set operates at a first
17 level of the dynamic process and the second Objective Rule Set operates at a second level
18 of the dynamic process.

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21 133. (Previously Presented) A method as in Claim 132, wherein said first and second
22 levels are indistinct and said first Objective Rule Set and said second Objective Rule Set
23 form a peer to peer organization.

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26 134. (Previously Presented) A method as in Claim 132, wherein said first and second
27 levels are distinct and said first Objective Rule Set and said second Objective Rule Set
28 form a hierarchical organization.

1 135. (Previously Presented) A method as in Claim 112, further comprising declaring and
2 stating at least a first Rule Set and a second Rule Set, wherein the second Rule Set is
3 subordinate to the first Rule Set, and wherein the first Rule Set further receives, from the
4 second Rule Set, the result of an Action by a Rule of the second Rule Set as satisfaction
5 of at least one Condition of a Rule of the first Rule Set.

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8 136. (Previously Presented) A method as in Claim 135, wherein the first Rule Set further
9 comprises at least a superior Objective and wherein the Action of the second Rule Set
10 conveys information to the first Rule Set sufficient for the first Rule Set to alter at least
11 the superior Objective when the superior Objective does not conform to a Measurable
12 Value from the real world.

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15 137. (Previously Presented) A method as in Claim 112, further comprising:
16 including at least a second Rule Set comprising a set of Rules that are connected
17 and have no Rule for which both its Condition is not satisfied by some
18 combination of Actions and events, and its Action does not eventually in
19 combination with the Actions of other Rules in the set satisfy the Conditions of at
20 least one Rule;
21 including at least a first Satisfied Rule in said second Rule Set whose Condition
22 has been satisfied at least once;
23 and,
24 further including a set of pairs comprising an identification of at least one
25 Satisfied Rule and a time said Satisfied Rule was satisfied, said set of pairs being
26 partially ordered and constituting a first subordinate process.

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29 138. (Previously Presented) A method as in Claim 137 wherein the second Rule Set
30 comprises the entire set of satisfied Rules of the first dynamic process and no explicit

1 ordering of the Rules in the second Rule Set is provided in defining said first dynamic
2 process.

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5 139. (Previously Presented) A method as in Claim 112 wherein said set of Rules includes
6 at least one anticipatory Rule, the satisfaction of the Condition portion of said
7 anticipatory Rule being merely a possibility and neither a prediction nor a mandate, when
8 said anticipatory Rule is initially stated.

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11 140. (Previously Presented) A method as in Claim 139 wherein said Condition of said
12 anticipatory Rule incorporates at least one conjunct which, at the time of creation of the
13 Rule, incorporates a Measurable Value that is contrary to the known and projected state
14 of the real world.

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17 141. (Previously Presented) A method as in Claim 112 further comprising:
18 storing said declarative and therefore non-procedural representation in a static and
19 stable form; and,
20 preserving human knowledge of said dynamic process.

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23 142. (Previously Presented) A method as in Claim 141 further comprising the steps of
24 organizing in a first business entity said declarative and therefore non-procedural
25 representation of said dynamic process for conveyance to a second business
26 entity, and,
27 conveying said declarative and therefore non-procedural representation from the
28 first business entity to the second business entity.

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30 143. (Previously Presented) A method as in Claim 141 wherein said declarative and
31 therefore non-procedural representation of said dynamic process stores knowledge of at

1 least one member of a set comprising organizational management, at least one model of
2 business organization, at least one operational process, and at least one strategic process.

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5 144. (Previously Presented) A method as in Claim 141 further comprising the steps of:
6 retrieving at least a portion of said declarative and therefore non-procedural
7 representation, and,
8 instantiating said portion of said declarative and therefore non-procedural
9 representation as a second dynamic process in a business.

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11 145. (Previously Presented) A method as in Claim 112 wherein the step of delegating to
12 at least one specific Actor further comprises:

13 a first Actor at a first level stating a plurality of business Rules comprising
14 possible Conditions, each Condition comprising at least one member of a set
15 comprising factual circumstance, market situation, business event, and
16 Measurable Value, and joined with at least one corresponding desired Action
17 matching a first measurable Goal;
18 a second Actor at a second level identifying a Goal-achieving set of business
19 Rules enabling said first measurable Goal to be attained;
20 and;
21 said second Actor communicating at least a first result of the Goal-achieving set
22 of Rules to said first Actor.

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25 146. (Previously Presented) A method as in Claim 145 wherein said plurality of business
26 Rules are responsive to a plurality of events, and wherein the actual operation of the
27 plurality of business Rules are combined to form a business process independent of any
28 pre-existing definition of the business process.

1 147. (Previously Presented) A method as in Claim 145 wherein said measurable Goal is
2 expressed as at least one Goal Rule comprising a Goal Condition which identifies said
3 measurable Goal and a Goal Action which specifies any combination of the members of a
4 measure set consisting of a measure of success, a measurement Constraint, and a measure
5 of failure.

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8 148. (Previously Presented) A method as in Claim 145 wherein the first Actor further:
9 identifies the maximum acceptable risk associated with each Risky Rule in a first
10 Risky Rule Set at the second level;
11 determines the risk associated with each Risky Rule; and,
12 for each Risky Rule in the first Risky Rule Set with risk that is not below the
13 maximum acceptable risk associated with said Risky Rule, further refines Actions
14 of each such Risky Rule by delegating its Actions as a Goal to a third Rule Set,
15 and the third Rule Set is at a third level.

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18 149. (Previously Presented) A method as in Claim 145 wherein the step of
19 communicating further comprises stating at least one Rule having at least one Condition
20 responsive to said desired Action and having an Action that performs said step of
21 communicating.

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24 150. (Previously Presented) A method as in Claim 145 wherein said first result is a
25 qualitative measure of at least one member of a set of measurable properties comprising
26 performance and Goal completion.

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29 151. (Previously Presented). A method as in Claim 145 wherein said first Actor effects
30 Delegation to at least one subordinate Actor any combination of any number of the

1 members of a Delegation set consisting of responsibility, accountability, and authority
2 that belong to the first Actor.

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5 152. (Previously Presented) A method as in Claim 151 wherein said first Actor further
6 effects Delegation by a Delegation Rule comprising at least one Delegation Condition
7 which tests the appropriateness of achieving said desired Action and at least one Action
8 which identifies at least one Actor as recipient of said Delegation.

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11 153. (Previously Presented) A method as in Claim 152 wherein the Delegation Rule
12 delegates authority by at least one member of a set comprising establishing at least one
13 Rule Set, modifying at least one Rule Set, and deleting at least one Rule Set.

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16 154. (Previously Presented) A method as in Claim 151 wherein the first Actor delegates
17 authority by at least one member of a set comprising establishing at least one Rule Set,
18 modifying at least one Rule Set, and deleting at least one Rule Set.

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21 155. (Previously Presented) A method as in Claim 151 wherein said Delegation of
22 accountability is accomplished by enabling at least one member of a set, comprising said
23 second Actor and said second Rule, to alter at least one member of a set comprising
24 measurement of predefined success and measurement process.

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27 156. (Previously Presented) A method as in Claim 145 further comprising identifying a
28 second Actor according to a Goal stated as a set of requirements Rules and a set of
29 requirements Constraints, and according to measurements stated as a set of capabilities
30 Rules.

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2 157. (Previously Presented) A method as in Claim 156, wherein each requirement Rule in
3 said set of requirements Rules comprises both:

4 at least one requirements Condition identifying at least one member of a set
5 comprising the desired Action and at least one capability required to accomplish
6 said desired Action; and,
7 at least one requirements Action identifying at least one member of a set
8 comprising at least one capability of said second Actor and said desired Action.
9
10

11 158. (Previously Presented) A method as in Claim 156, wherein each capability Rule in
12 said set of capabilities Rules consists of at least one member of a set comprising:

13 at least one capabilities Condition identifying at least one Actor and at least one
14 capabilities Action identifying at least one capability of said Actor; and,
15 at least one capabilities Condition identifying at least one capability, and at least
16 one capabilities Action identifying at least one Actor having said capability.
17
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19 159. (Previously Presented) A method as in Claim 156, further comprising a step of
20 matching said second Actor with said desired Goal by at least one criteria for comparing
21 at least one requirements Rule and at least one capabilities Rule.
22
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24 160. (Previously Presented) A method as in Claim 159 wherein said criteria is established
25 using at least one member of a match set comprising a best fit match algorithm, a fuzzy
26 match algorithm, an approximate match algorithm, and an exact match algorithm.
27
28

29 161. (Previously Presented) A method as in Claim 112 wherein the step of modifying at
30 least one Element through the Action of at least a Rule whose Condition is triggered by at
31 least one input from at least one real world event, further comprises:

1
2 defining a first adaptation process comprising at least one adaptation Rule;
3
4 constructing the adaptation Rule from a Third Rule and requiring in the adaptation
5 Rule's Action at least one member of a set of Actions comprising Element
6 creation, self-modification, feedback, contradiction resolution, conflict resolution,
7 correction for failure, and decision making, each of which is not already any
8 previously existing Rule's Action;
9
10 satisfying the Condition of the adaptation Rule through an event; and,
11
12 affecting at least one Element through the Action of the adaptation Rule.
13
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15 162. (Previously Presented) A method as in Claim 161 wherein said first adaptation
16 process is independent of any external agent.
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19 163. (Previously Presented) A method as in Claim 161 further comprising monitoring
20 performance by and against specific metrics;
21 wherein the Condition of the adaptive Rule is satisfied by performance deviations
22 from the specific metrics; and the Action of the adaptive Rule is representative of
23 at least one member of a set comprising business events, business measures,
24 business decisions, business Rules, and business processes.
25
26

27 164. (Previously Presented) A method as in Claim 161 further comprising:
28 modifying, through the Action of at least one adaptation Rule, at least a first
29 Changed Rule instantiated at a first level;
30 effectively modifying through the first Changed Rule instantiated at a first level at
31 least a first Goal of the first level; and

1 permitting but not requiring intervention from a higher level.

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4 165. (Previously Presented) A method as in Claim 161 further comprising:

5 continuously monitoring for at least one occurrence of the at least one real world
6 event; and,
7 continuously modifying the Elements of the dynamic process, in response to the
8 occurrence of the at least one real world event.

9
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11 166. (Previously Presented) A method as in Claim 161 further comprising:

12 incorporating at least one member of a set of dynamic processes comprising
13 creation, deletion, modification, and correction of both Objectives and Elements;
14 linking the adaptation process to at least one member of the set of dynamic
15 processes; and,
16 modifying the Objectives and Elements by the adaptation process according to at
17 least one member of a set comprising Conditions and Constraints.

18
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20 167. (Previously Presented) A method as in Claim 161 wherein the step of modifying at
21 least one Element comprises:

22 detecting a contradiction;
23 changing at least one Rule Set, further comprising:
24 identifying at least a first and second conflicting Rule; and,
25 resolving the contradiction by at least one member of a set comprising adding a
26 new Constraint, altering a existing Constraint, adding a new Rule, altering at least
27 one of the first and second conflicting Rules, and eliminating at least one of the
28 first and second conflicting Rules; and,
29 logically differentiating the Actions of the first and second conflicting Rules.

1 168. (Previously Presented) A method as in Claim 161 further comprising reducing at
2 least one operational latency in the dynamic process through the Action of the adaptation
3 Rule.

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6 169. (Previously Presented) A method as in Claim 161 wherein the adaptation Rule's
7 Condition is satisfied when a first contradiction occurs, and the adaptation Rule's Action
8 modifies at least one Element.

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11 170. (Previously Presented) A method as in Claim 169 wherein the first contradiction
12 comprises at least first and second logically-conflicting Elements, and the adaptation
13 Rule's Action selects one of the conflicting Elements through at least one member of a
14 set of selection techniques comprising random selection, deterministic selection, and
15 arbitrary selection, and modifies the selected Element.

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18 171. (Previously Presented) A method as in Claim 170 wherein the modification of the
19 selected Element prevents simultaneous application of the first and second logically-
20 conflicting Elements.

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23 172. (Previously Presented) A method as in Claim 169 wherein the first contradiction
24 comprises at least first and second logically-conflicting Elements, and the adaptation
25 Rule's Action alters at least one of the first and second logically-conflicting Elements and
26 creates a differentiation between the first conflicting Rule's Condition and the second
27 conflicting Rule's Condition, said differentiation preventing the first conflicting Rule's
28 Condition and the second conflicting Rule's Condition from being satisfied by the same
29 set of measurable inputs and Elements.

1 173. (Previously Presented) A method as in Claim 172 wherein the adaptation Rule's
2 Action alters at least one of the first and second logically-conflicting Elements, modifies
3 the first logically-conflicting Element to include a Constraint not present in the second
4 logically-conflicting Element, and prevents the possibility of the first and second
5 logically-conflicting Elements from simultaneously occurring.

6
7
8 174. (Previously Presented) A method as in Claim 161 wherein the step of constructing
9 the adaptation Rule further comprises:

10 stating the adaptation Rule's Condition to be satisfied when a first failure occurs;
11 and,
12 stating the adaptation Rule's Action to both incorporate modification of at least
13 one Element and effect a correction for the first failure.

14
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16 175. (Previously Presented) A method as in Claim 174 wherein the first failure comprises
17 not attaining a first Goal and the modification of at least one Element enables the first
18 Goal to be attained by correcting at least one member of a set comprising at least one
19 cause of the first failure and at least one effect of the first failure.

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22 176. (Previously Presented) A method as in Claim 174 wherein the modification of at
23 least one Element includes at least one member of a set of steps comprising creating,
24 modifying, and deleting a second adaptation Rule.

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27 177. (Previously Presented) A method as in Claim 174 wherein the first failure comprises
28 not detecting a Measurable Value and the modification of at least one Element comprises
29 at least one member of a set comprising creating the Element, modifying the Element,
30 and deleting the Element.

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2 178. (Previously Presented) A method as in Claim 174, wherein a second failure
3 comprises not attaining a second Goal and the modification of at least one Element
4 includes the step of redeclaring and restating at least one Action of at least one Rule as a
5 second dynamic process.
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8 179. (Previously Presented) A method as in Claim 174, wherein the first failure
9 comprises not attaining a first Goal and the modification of at least one Element enables
10 said first Goal to be attained by correcting at least one member of a failure set comprising
11 at least a first cause of the first failure and at least a first effect of the first failure.
12
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14 180. (Previously Presented) A method as in Claim 174 wherein the adaptation Rule's
15 Action modifies at least a member Rule of the Objective Rule Set and, when the member
16 Rule's Condition is satisfied, the member Rule's Action modifies, without human
17 intervention, at least a first member of the set of measurable Goals.
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20 181. (Previously Presented) A method as in Claim 174 wherein the adaptation Rule's
21 Action modifies at least a first Adaptable Rule of a set of Rules and, when the first
22 Adaptable Rule's Condition is satisfied, the first Adaptable Rule's Action modifies,
23 without human intervention and without modification of any Rule of the Objective Rule
24 Set, at least a first member of a set comprising subordinate Goals and measurable Goals.
25
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27 182. (Previously Presented) A method as in Claim 174, wherein the step of declaring and
28 stating at least one Objective Rule Set further comprises:

29 stating at least a first Objective Rule Set and a second Objective Rule Set,
30 wherein the first Objective Rule Set operates at a first level of the dynamic

process and the second Objective Rule Set operates at a second level of the dynamic process;
and wherein the adaptation Rule's Condition effectively defines the need for a closed loop effect in said first level and the adaptation Rule's Action changes at least one Element in said second level.

183. (Previously Presented) A method as in Claim 174, wherein the step of modifying at least one Element comprises modifying at least one member of a set comprising Goal, Rule, Rule Set, Condition, Action, Constraint, Measurable Value, and Delegation.

184. (Previously Presented) A method as in Claim 174 wherein the step of declaring and stating at least one Objective Rule Set comprises stating at least a first Objective Rule Set and a second Objective Rule Set:

wherein the first Objective Rule Set operates at a first level of the dynamic process and the second Objective Rule Set operates at a second level of the dynamic process; and,
wherein a first Goal is associated with the first level and a second Goal is associated with the second level; and the first Goal and the second Goal overlap by having a subgoal in common.

185. (Previously Presented) A method as in Claim 184 further comprising modifying the overlap to avoid at least one member of a set comprising confrontation problems and race-condition problems.

186. (Previously Presented) A method as in Claim 112, wherein the step of declaring and stating at least one Objective Rule Set comprises stating at least a first Objective Rule Set and a second Objective Rule Set, wherein the first Objective Rule Set operates at a first

1 level of the dynamic process and the second Objective Rule Set operates at a second level
2 of the dynamic process, and further comprising an organizing Rule comprising:
3 an organizing Condition; and
4 an organizing Action;
5 and the organizing Condition is satisfied by the Condition of at least one Rule in said first
6 Objective Rule Set and the organizing Action comprises at least the second Objective
7 Rule Set.

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10 187. (Previously Presented) A method as in Claim 186 wherein said organizing Action
11 delegates at least one member of the set comprising a Rule Set, authority, accountability,
12 and responsibility, and said organizing Rule creates a hierarchical Delegation.

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15 188. (Previously Presented) A method as in Claim 112 wherein the step of declaring and
16 stating at least one Objective Rule Set further comprises stating at least a first Objective
17 Rule Set and a second Objective Rule Set, wherein the first Objective Rule Set operates
18 at a first level of the dynamic process and the second Objective Rule Set operates at a
19 second level of the dynamic process, and wherein the response to at least one Action of at
20 least one Rule in the first Objective Rule Set becomes at least one Condition of at least
21 one Rule in the second Objective Rule Set.

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24 189. (Previously Presented) A method as in Claim 188 wherein the first level and the
25 second level are identical, and at least one Rule in the first Rule Set receives at least one
26 response of at least one Rule in the second Rule Set as its Condition.

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29 190. (Previously Presented) A method as in Claim 141 further comprising:
30 analyzing the business operations represented in said declarative and therefore
31 non-procedural representation; and,

1 refining and tuning at least one member of a set comprising Decision, Business
2 Rule, and Business Process.

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4 191. (CANCELLED)

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6 192. (CURRENTLY AMENDED) An apparatus for actively and declaratively managing,
7 implementing, and executing a first dynamic process incorporating a dynamic pattern of
8 operations driven by real-world Conditions, through which at least a first behavioral
9 pattern emerges, comprising:

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11 static memory containing

12 a set of measurable Goals and Constraints of said first dynamic process;
13 at least one Rule Set having a plurality of Rules:

14 wherein the Rules in said Rule Set may act in any order subject to
15 the limitation that, for any specific Rule in said Rule Set, that
16 specific Rule's Condition and applicable Constraints must be
17 satisfied before that specific Rule's Action may occur;

18 a declarative and therefore non-procedural representation of each Element,
19 and any of the a set of steps of declaring, stating, delegating, determining,
20 and modifying;

21

22 means for accepting at least one input from the real world, said input comprising a
23 Measurable Value;

24

25 means for comparing any input against the Condition of all Elements contained in
26 the static memory;

27

28 means for delegating to at least one specific set of Actors consisting of at least
29 one Actor:

1 at least a first subordinate Objective, subordinate to the Objective, stating
2 the first subordinate Objective as a subset of subordinate, measurable
3 Goals and subordinate Constraints;
4 a set of Rules for accomplishing said first subordinate Objective;
5 authority via at least one Rule stating authority for attaining the
6 subordinate, measurable Goals of said first subordinate Objective;
7 accountability via at least one Rule stating accountability for attaining the
8 subordinate, measurable Goals of said first subordinate Objective; and,
9 responsibility via at least one Rule stating responsibility for attaining the
10 subordinate, measurable Goals of said first subordinate Objective subject
11 to the Constraints and subordinate Constraints;

12
13 means for determining ~~the satisfaction of any~~ if at least one Rule's Condition is
14 satisfied and if so subsequently triggering ~~the occurrence of~~ said Rule's Action
15 wherein said Rule's Condition incorporates at least one Measurable Value from at
16 least one member of a set of sources and said set of sources comprise a source
17 internal to said first dynamic process, a source external to said first dynamic
18 process, and a source in the real world;

19
20 means for modifying at least one Element through the Action of at least a Rule
21 whose Condition is triggered by at least one input from an event in the real world;

22
23 means for executing automatically at least a subset of the dynamic pattern of
24 operations, defining said subset of the dynamic pattern of operations as
25 comprising a plurality of operations, each operation therein being temporally
26 contiguous to at least one other operation in said subset of the dynamic pattern of
27 operations; and,

28
29 means for specifying a plurality of Elements and implementing each of the steps
30 of declaring and stating, delegating, determining, and modifying, through a
31 declarative and therefore non-procedural representation;

means for using said set of steps of declaring, stating, delegating, determining, and modifying, to further the attainment of a Goal of said first dynamic process independent of human action;

and,

means for iterating through the steps of declaring, stating, delegating, determining, and modifying.